

Contents of *Aquaculture*, Volume 213

VOL. 213 NOS. 1–4

18 October 2002

Diseases, Parasites and Predators

- Level and percentage recovery of resistance to oxytetracycline and oxolinic acid of bacteria from shrimp ponds
E.A. Tendencia and L.D. dela Pena (Tigbauan, Philippines) 1
- Effect of aerobic Gram-positive heterotrophic bacteria associated with *Artemia franciscana* cysts on the survival and development of its larvae
C. Orozco-Medina, A.M. Maeda-Martinez and A. Lopez-Cortes (La Paz, Mexico) 15
- Abdominal macroparasites of commercially important flatfishes (Teleostei: Scophthalmidae, Pleuronectidae, Soleidae) in northwest Spain (ICES IXa)
F. Alvarez, R. Iglesias, A.I. Parama, J. Leiro and M. Sanmartin (Santiago de Compostela, Spain) .. 31
- Characterization, pathogenicity and neutralization studies of a nervous necrosis virus isolated from grouper, *Epinephelus taurina*, in Singapore
A. Hegde, C.L. Chen, Q.W. Qin, T.J. Lam and Y.M. Sin (Singapore, Singapore). 55
- Growth by cell division in shrimp (*Penaeus japonicus*) cell culture
G.-h. Lang (Tsukuba, Japan, Qingdao, China), N. Nomura (Ibaraki, Japan) and M. Matsumura (Tsukuba, Japan) 73

Genetics and Breeding

- Genetic correlations between body weight at different ages and with reproductive traits in rainbow trout
G.-S. Su (Tjele, Denmark), L.-E. Liljedahl (Uppsala, Sweden) and G.A.E. Gall (Davis, CA, USA) . 85
- Determination of the temperature-dependent index of mitotic interval (τ_0) for chromosome manipulation in winter flounder *Pseudopleuronectes americanus*
I.-S. Park (Pusan, South Korea) and S.C. Johnson (Halifax, Canada) 95
- Loss of microsatellite and mitochondrial DNA variation in hatchery strains of Japanese flounder *Paralichthys olivaceus*
M. Sekino (Shiogama, Japan), M. Hara and N. Taniguchi (Sendai, Japan) 101
- Cold tolerance of three strains of Nile tilapia, *Oreochromis niloticus*, in China
L. Sifa, L. Chenhong (Shanghai, China), F. Gagalac and R. Dunham (Penang, Malaysia). 123

Husbandry and Management

- Evaluation of polyculture of Indian major carps in periphyton-based ponds
M.E. Azim, M.C.J. Verdegem (Wageningen, The Netherlands), M.M. Rahman, M.A. Wahab (Mymensingh, Bangladesh), A.A. van Dam (Wageningen, The Netherlands) and M.C.M. Beveridge (Stirling, UK) 131
- Larval survival and growth in *Wallago attu* (Bloch and Schneider): effects of light, photoperiod and feeding regimes
S.S. Giri, S.K. Sahoo, B.B. Sahu, A.K. Sahu, S.N. Mohanty, P.K. Mukhopadhyay and S. Ayyappan (Bhubaneswar, India). 151

Acute toxicity of nitrate on <i>Penaeus monodon</i> juveniles at different salinity levels S.-J. Tsai and J.-C. Chen (Taiwan, People's Republic of China)	163
Stocking density and growth of the Pacific oyster (<i>Crassostrea gigas</i>) and the Sydney rock oyster (<i>Saccostrea glomerata</i>) in Port Stephens, Australia P.J.C. Honkoop and B.L. Bayne (Sydney, Australia)	171
Growth rates of the venus clam <i>Ruditapes largillierii</i> grown under experimental culture conditions in New Zealand P.E. Gribben, R.G. Creese and S.H. Hooker (Auckland, New Zealand)	187
Induced ovulation of <i>Pangasius bocourti</i> (Sauvage, 1880) with a progressive hCG treatment P. Cacot (Montpellier, France), M. Legendre (Jakarta, Indonesia), T.Q. Dan (Chaudoc City, Viet Nam), L.T. Tung, P.T. Liem (Cantho City, Viet Nam), C. Mariojouis (Paris, France) and J. Lazard (Montpellier, France)	199
The effect of periphyton and supplemental feeding on the production of the indigenous carps <i>Tor khudree</i> and <i>Labeo fimbriatus</i> P. Keshavanath, B. Gangadhar, T.J. Ramesh (Mangalore, India), A.A. van Dam (Wageningen, The Netherlands), M.C.M. Beveridge (Stirling, UK) and M.C.J. Verdegem (Wageningen, The Netherlands)	207
Bioeconomic analysis of production location of sea bream (<i>Sparus aurata</i>) cultivation E. Gasca-Leyva (Merida, Mexico), C.J. Leon, J.M. Hernandez and J.M. Vergara (Las Palmas de Gran Canaria, Spain)	219
Growth, mortality, pathological conditions and protein expression of <i>Mytilus edulis</i> and <i>M. galloprovincialis</i> crosses cultured in the Ria de Arousa (NW of Spain) J. Fuentes (Pontevedra, Spain), J.L. Lopez, E. Mosquera (Coruna, Spain), J. Vazquez (Madrid, Spain), A. Villalba and G. Alvarez (Coruna, Spain)	233
In vivo photostabilization of tetracycline hydrochloride by reduced glutathione for use as an ecological marker in <i>Salmo salar</i> A.J. MacFarlane, D.L. Sutherland, T.R. Goff and K.M. Gilmour (Ottawa, ON, Canada)	253
Effects of light intensity, spectral composition and photoperiod on development and hatching of haddock (<i>Melanogrammus aeglefinus</i>) embryos G. Downing and M.K. Litvak (Saint John, New Brunswick, Canada)	265
Feeding frequency affects food consumption, feeding pattern and growth of juvenile yellowtail flounder (<i>Limanda ferruginea</i>) K.S. Dwyer, J.A. Brown, C. Parrish (St. John's, Newfoundland, Canada) and S.P. Lall (Halifax, Nova Scotia, Canada)	279
Seawater growth and maturation of Atlantic salmon (<i>Salmo salar</i>) transferred to sea at different times during the year N.J. Duncan (Stirling, UK, Mazatlan, Mexico), M.A. Thrush (Stirling, UK), J.A.K. Elliott (Dumfries, UK) and N.R. Bromage (Stirling, UK)	293
Effects of delayed metamorphosis on larval competence, and postlarval survival and growth of abalone <i>Haliotis discus hannai</i> H. Takami (Shiogama, Japan), T. Kawamura (Nakano, Japan) and Y. Yamashita (Shiogama, Japan)	311
Alternative means of nursery culture for commercial scallop (<i>Pecten fumatus</i> Reeve) spat M.P. Heasman, W.A. O'Connor (NSW, Australia), A.W. Frazer (Dunedin, New Zealand), Y. Languet (Montpellier, France) and S.J. O'Connor (NSW, Australia)	323
Nutrition	
Methods of measuring feed digestibility in the green abalone (<i>Haliotis fulgens</i>) J. Montano-Vargas (Ensanada, Mexico), A. Shimada (Ajuchitlan Mexico), C. Vasquez (Ciudad Universitaria, Mexico) and M.T. Viana (Ensenada, Mexico)	339
Advanced DHA, EPA and ArA enrichment materials for marine aquaculture using single cell heterotrophs M. Harel (Baltimore, MD, USA), W. Koven (Eilat, Israel), I. Lein, Y. Bar (Eilat, Israel, Sunndalsora, Norway), P. Behrens (Columbia, MD, USA), J. Stubblefield, Y. Zohar and A.R. Place (Baltimore, MD, USA)	347

Effects of dietary protein level on growth performance, carcass composition and ammonia excretion in juvenile silver perch (<i>Bidyanus bidyanus</i>) S.-D. Yang (Chupei, Taiwan), C.-H. Liou (Keelung, Taiwan) and F.-G. Liu (Yunlin, Taiwan)	363
Physiology and Endocrinology	
Hand-stripping of semen and semen quality after maturational hormone treatments, in African catfish <i>Clarias gariepinus</i> A.T.M. Viveiros, Y. Fessehaye, M. ter Veld (Wageningen, The Netherlands), R.W. Schulz (Utrecht, The Netherlands) and J. Komen (Wageningen, The Netherlands).	373
Juvenile sunshine bass (<i>Morone chrysops</i> ♀ × <i>Morone saxatilis</i> ♂) do not require dietary myo-inositol D.-F. Deng (Mississippi State, MS, USA), G.-I. Hemre (Bergen, Norway) and R.P. Wilson (Mississippi, MS, USA)	387
Technical Communication	
Results of an attempt for mass production of <i>Artemia</i> in extensive ponds O. Zmora, E. Avital and H. Gordin (Eilat, Israel)	395
Contents of Aquaculture, Volume 213	401